

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q79610

Susumu KAYAMA, et al.

Appln. No.: 10/586,540

Group Art Unit: 2811

Confirmation No.: Not Yet Assigned

Examiner: Not Yet Assigned

Filed: July 19, 2006

For: METAL OXIDE DISPERSION, METAL OXIDE ELECTRODE FILM, AND DYE
SENSITIZED SOLAR CELL

**REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT AND NOTICE OF
ACCEPTANCE**

ATTN: Office of Initial Patent Examination
Filing Receipt Correction
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

We enclose a copy of the Official Filing Receipt and Notice of Acceptance for the above-identified application and request the following correction(s):

DATE OF COMPLETION OF ALL 35 U.S.C. 371 REQUIREMENTS

~~07/22/2006~~ 07/19/2006

Applicants

Susumu Kayama, Toyama-shi, Toyama, JAPAN;

Yasuaki Wakizaka, Toyama-shi, JAPAN;

Kunio Kondo, Chiba-shi, JAPAN;

Assignment For Published Patent Application

SHOWA DENKO K.K., Tokyo, JAPAN

Verification for the requested correction(s) is indicated on the Declaration, Assignment
and Electronic Acknowledgement Receipt filed and received July 19, 2006.

Respectfully submitted,

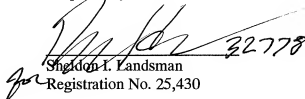
SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: November 10, 2008


Sheldon I. Landsman
Registration No. 25,430



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO. 10/586,540	FIRST NAMED APPLICANT Susumu Kayama	ATTY. DOCKET NO. Q79610
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23373
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

INTERNATIONAL APPLICATION NO. PCT/JP05/01180	
I.A. FILING DATE 01/21/2005	PRIORITY DATE 01/22/2004

DOCKETED

OCT 10 2008

CONFIRMATION NO. 1641
371 ACCEPTANCE LETTER



Date Mailed: 10/07/2008

NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495

The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495), has determined that the above identified international application has met the requirements of 35 U.S.C. 371, and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.

The United States Application Number assigned to the application is shown above and the relevant dates are:

07/19/2006
DATE OF RECEIPT OF 35 U.S.C. 371(c)(1),
(c)(2) and (c)(4) REQUIREMENTS

07/22/2006 07/19/2006
DATE OF COMPLETION OF ALL
35 U.S.C. 371 REQUIREMENTS

A Filing Receipt (PTO-103X) will be issued for the present application in due course. **THE DATE APPEARING ON THE FILING RECEIPT AS THE " FILING DATE" IS THE DATE ON WHICH THE LAST OF THE 35 U.S.C. 371 (c)(1), (c)(2) and (c)(4) REQUIREMENTS HAS BEEN RECEIVED IN THE OFFICE. THIS DATE IS SHOWN ABOVE.** *The filing date of the above identified application is the international filing date of the international application (Article 11(3) and 35 U.S.C. 363).* Once the Filing Receipt has been received, send all correspondence to the Group Art Unit designated thereon.

The following items have been received:

- Copy of the International Application filed on 07/19/2006
- Copy of the International Search Report filed on 07/19/2006
- Preliminary Amendments filed on 07/19/2006
- Information Disclosure Statements filed on 07/19/2006
- Oath or Declaration filed on 07/19/2006
- U.S. Basic National Fees filed on 07/19/2006
- Priority Documents filed on 07/19/2006
- Specification filed on 07/19/2006
- Claims filed on 07/19/2006
- Abstracts filed on 07/19/2006
- Drawings filed on 07/19/2006



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY DOCKET NO	TOT CLAIMS	IND CLAIMS
10/586,540	07/19/2006	2811	4350	Q79610	68	7

CONFIRMATION NO. 1641

FILING RECEIPT



OC000000032461722

23373
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

DOCKETED

OCT 10 2008

Date Mailed: 10/07/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

Susumu Kayama, [Toyama-shi, Toyama] JAPAN; TOYAMA-SHI
Yasuaki Wakizaka, Toyama-shi, JAPAN;
Kunio Kondo, Chiba-shi, JAPAN;

Assignment For Published Patent Application

[SHOWA DENKO K.K.] SHOWA DENKO K.K., TOKYO, JAPAN

Power of Attorney: The patent practitioners associated with Customer Number 23373

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP05/01180 01/21/2005
which claims benefit of 60/541,504 02/04/2004
and claims benefit of 60/541,503 02/04/2004

Foreign Applications

JAPAN 2004-014971 01/22/2004
JAPAN 2004-014987 01/22/2004
JAPAN 2004-342808 11/26/2004

If Required, Foreign Filing License Granted: 10/06/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 10/586,540**

Projected Publication Date: 01/15/2009

Non-Publication Request: No

Early Publication Request: No

53

REQUEST FOR EARLY NOTIFICATION OF SERIAL NUMBER

NATIONAL STAGE OF PCT/JP2005/001180 FILED ON January 21, 2005

Inventor(s): Susumu KAYAMA, Yasuaki WAKIZAKA, and Kunio KONDO

Title: METAL OXIDE DISPERSION, METAL OXIDE ELECTRODE FILM, AND DYE SENSITIZED SOLAR CELL

Atty Doc. #: Q79610 Client: SEIWA PATENT & LAW

Filing Date: July 19, 2006 # Pgs. Spec/Abst: 100/1 #Claims: 68

Dwg. Sheets: 4 Decl Yes (5 pages) Prelim Amdt Yes

IDS/Prior Art: Yes Pr Doc: No Asgmt: Yes Fee: \$4350/40
PCT/ISA/210 and PCT/ISA/237

☒ Check Attached ☐ Charge to Deposit # 19-4880 Atty/Sec: SIL/sdc

PTO SB/08 A&B and PTO FORM 1595

SERIAL NO.:

CONF NO.:



REQUEST FOR EARLY NOTIFICATION OF SERIAL NUMBER

NATIONAL STAGE OF PCT/JP2005/001180 FILED ON January 21, 2005

Inventor(s): Susumu KAYAMA, Yasuaki WAKIZAKA, and Kunio KONDO

Title: METAL OXIDE DISPERSION, METAL OXIDE ELECTRODE FILM, AND DYE SENSITIZED SOLAR CELL

Atty Doc. #: Q79610 Client: SEIWA PATENT & LAW

Filing Date: July 19, 2006 # Pgs. Spec/Abst: 100/1 #Claims: 68

Dwg. Sheets: 4 Decl Yes (5 pages) Prelim Amdt Yes

IDS/Prior Art: Yes Pr Doc: No Asgmt: Yes Fee: \$4350/40
PCT/ISA/210 and PCT/ISA/237

☒ Check Attached ☐ Charge to Deposit # 19-4880 Atty/Sec: SIL/sdc

PTO SB/08 A&B and PTO FORM 1595

SERIAL NO.:

10/586540
IAP7 REC'D PCT/PTO 19 JUL 2006
CONF NO.:

DECLARATION AND POWER OF ATTORNEY FOR UTILITY OR DESIGN PATENT APPLICATION (37 C.F.R. 1.63)

実用・意匠特許出願宣言書および委任状 (37 C.F.R. 1.63)

Japanese Language Declaration

私は以下の通り宣言します:

各発明者の住所、郵送先、および国籍は下記氏名の後に記載された通りです。

下記名称の発明に関し請求範囲に記載され特許出願がされている発明内容につき、下記に記載された発明者が本来かつ最初の発明者であると信じます。

☐ 上記発明の明細書は本書に添付されます。

または

☐ 上記発明は米国出願番号あるいはPCT国際出願番号
(確認番号_____)として_____
年__月__日に出願され、
____年__月__日に補正されました (該当
する場合)。

私は補正が上に明示された場合は補正された特許請求範囲を含む前記明細書の内容を検討し、理解していることをここに表明します。

私は一部継続出願の場合先行出願の出願日から一部継続出願の国内あるいはPCT国際出願日までの期間中に入手された重要な情報を含み、37 C.F.R. 1.56に定義される特許性に肝要な情報について開示義務があることを認めます。

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METAL OXIDE DISPERSION, METAL OXIDE
ELECTRODE FILM, AND DYE SENSITIZED
SOLAR CELL

☐ the specification of which is attached hereto

OR

☒ was filed on January 21, 2005
as United States Application Number or PCT
International Application Number PCT/JP2005/001180
(Confirmation No. _____),
and was amended on _____
(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part application(s), material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Japanese Language Declaration

私は35 U.S.C. 119(a)-(d) あるいは (f),
または365(b)に基づき特許、発明者、あるいは植物育種
家証書の下記外国出願、または365(a)に基づきアメリカ
合衆国以外の少なくとも1ヶ国を指定した下記PCT国際出
願についての外国優先権特典をここに主張するとともに
、下記項目にx印を付けることにより優先権を主張する出
願以前の出願日を有する特許、発明者、あるいは植物育
種家証書の外国出願またはPCT国際出願を示します。

Prior Foreign Application Number(s)
先行外国出願番号

2004-014971 (Pat. Appln.) Japan

(Application Number)
(出願番号)

(Country)
(国名)

22/January/2004

(Filing Date)
(出願日)

Priority Claimed?
優先権の主張 ?

Yes No
有り 無し
☒ ☐

2004-014987 (Pat. Appln.) Japan

(Application Number)
(出願番号)

(Country)
(国名)

22/January/2004

(Filing Date)
(出願日)

☒ ☐

* Please see the attachment for additional Prior Foreign Application.

私は35 U.S.C. 119(e)に基づき下記の特許出願の国内
優先権をここに主張します。

I hereby claim domestic priority under 35 U.S.C. 119(e) of any

United States provisional application(s) listed below.

60/541,504

(Application Number)
(出願番号)

04/February/2004

(Filing Date)
(出願日)

60/541,503

(Application Number)
(出願番号)

04/February/2004

(Filing Date)
(出願日)

私は35 U.S.C. 1201に基づき下記米国特許出願、あるいは
365(c)に基づき米国を指定する下記PCT国際出願の利益を
ここに主張し、本特許出願内特許請求範囲の各項目の内
容が35 U.S.C. 112の最初の項に規定される方法により先
行米国あるいはPCT国際特許出願で開示されていない限り
において37 C.F.R. 1.56に定義される本出願の特許性に
肝要で、先行特許出願の出願日から本特許出願の国内
あるいはPCT国際出願日までの期間中に入手された情報
について開示義務があることを認めます。

Prior U.S. or International Application Number(s)
先行米国あるいは国際出願番号

(Application Number)
(出願番号)

(Filing Date)
(出願日)

(Status: patented, pending, abandoned)
(状態: 特許成立済、係属中、放棄済)

(Application Number)
(出願番号)

(Filing Date)
(出願日)

(Status: patented, pending, abandoned)
(状態: 特許成立済、係属中、放棄済)

私は本宣言書内で私自身の知識に基づいてなされたすべ
ての陳述が真実であり、情報および信ずるところに基づ
いてなされたすべての陳述が真実であると信じられてい
ることをここに宣言し、さらに故意になされた虚偽の陳
述等々は18 U.S.C.
1001に基づき罰金あるいは拘禁または両方による処罰に
あたり、またかような故意による虚偽の陳述はそれに基づ
く特許出願あるいは成立特許の有効性を危うくする可
能性があることを認識した上でこれらの陳述をなしたこ
とを宣言します。

I hereby claim benefit under 35 U.S.C. 120 of any United States
application(s) or 365(c) of any PCT international application(s)
designating the United States, listed below and, insofar as the
subject matter of each of the claims of this application is not
disclosed in a listed prior United States or PCT international
application in the manner provided by the first paragraph of
35 U.S.C. 112, I acknowledge my duty to disclose any
information material to the patentability of this application as
defined in 37 C.F.R. 1.56 which occurred between the filing
date of the prior application and the national or PCT
international filing date of this application:

I hereby declare that all statements made herein of my own
knowledge are true and that all statements made on information
and belief are believed to be true; and further that these
statements were made with the knowledge that willful false
statements and the like so made are punishable by fine or
imprisonment, or both, under 18 U.S.C. 1001 and that such
willful false statements may jeopardize the validity of the
application or any patent issued thereon.

Japanese Language Declaration

委任状：私は下記の米国特許商標局 (USPTO) 顧客番号のもとに記載されるSUGHRUE MION法律事務所すべての弁護士を、同顧客番号のもとに記載される個々の弁護士はSughrue Mion法律事務所からの自由裁量に基づき変更され得ることを認識した上で、本特許出願の手続きおよびそれに関わる米国特許商標局との業務を遂行する弁護士として指名し、本特許出願に関するすべての通信が同USPTO顧客番号のもとに提出された住所宛に送付されることを要請します。

POWER OF ATTORNEY: I hereby appoint all attorneys of SUGHRUE MION, PLLC who are listed under the USPTO Customer Number shown below as my attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Sughrue Mion, PLLC, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number.

STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 C.F.R. §1.69(b):

The declaration and power of attorney is an accurate translation of the corresponding English language declaration and power of attorney.

Signature

Date

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

電話連絡は下記へ：

SUGHRUE MION, PLLC
(202) 293-7060

Direct Telephone Calls to:

SUGHRUE MION, PLLC
(202) 293-7060

NAME OF SOLE OR FIRST INVENTOR:			
唯一あるいは第一の発明者名 Susumu Kayama			
Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合]) Susumu		Family Name or Surname 姓 Kayama	
Inventor's signature 発明者の署名 Susumu Kayama		Date 日付 May 18, 2006	
Residence: 住所: Toyama-shi, Toyama, Japan		Citizenship 国籍 Japanese	
Mailing Address: c/o SHOWA TITANIUM CO. LTD., 3-1, Nishinomiyamachi, Toyama-shi, Toyama 郵送先: 931-8577, Japan			
NAME OF SECOND INVENTOR:			
第二の発明者名: Yasuaki Wakizaka			
Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合]) Yasuaki		Family Name or Surname 姓 Wakizaka	
Inventor's signature 発明者の署名 Yasuaki Wakizaka		Date 日付 June 15 2006	
Residence: 住所: Toyama-shi, Toyama, Japan		Citizenship 国籍 Japanese	
Mailing Address: c/o SHOWA TITANIUM CO. LTD., 3-1, Nishinomiyamachi, Toyama-shi, Toyama 郵送先: 931-8577, Japan			

NAME OF THIRD INVENTOR:

第三の発明者名: Kunio Kondo

Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合]) Kunio		Family Name or Surname 姓 Kondo	
Inventor's signature 発明者の署名 <i>Kunio Kondo</i>		Date 日付 May 16, 2006	Citizenship 国籍 Japanese
Residence: 住所: Chiba-shi, Chiba, Japan			
Mailing Address: 郵送先: c/o Corporate R&D Center, SHOWA DENKO K.K., 1-1, Ohmukai 1-chome, Midori-ku, Chiba-shi, Chiba 267-0056, Japan			

NAME OF FOURTH INVENTOR:

第四の発明者名:

Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合])		Family Name or Surname 姓	
Inventor's signature 発明者の署名		Date 日付	Citizenship 国籍
Residence: 住所:			
Mailing Address: 郵送先:			

NAME OF FIFTH INVENTOR:

第五の発明者名:

Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合])		Family Name or Surname 姓	
Inventor's signature 発明者の署名		Date 日付	Citizenship 国籍
Residence: 住所:			
Mailing Address: 郵送先:			

NAME OF SIXTH INVENTOR:

第六の発明者名:

Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合])		Family Name or Surname 姓	
Inventor's signature 発明者の署名		Date 日付	Citizenship 国籍
Residence: 住所:			
Mailing Address: 郵送先:			

NAME OF SEVENTH INVENTOR:

第七の発明者名:

Given Name (first and middle [if any]) 名 (名およびミドルネーム[該当する場合])		Family Name or Surname 姓	
Inventor's signature 発明者の署名		Date 日付	Citizenship 国籍
Residence: 住所:			
Mailing Address: 郵送先:			

Supplemental Priority Data Sheet
優先権に関する追補データシート

Additional prior foreign applications:
追加的先行外国特許出願：

Application Number(s) 出願番号	Country 国名	Filing Date 出願日	Priority Claimed? 優先権の主張？	
			Yes 有り	No 無し
2004-342808 (Pat. Appln.)	Japan	26/November/2004	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
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			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

Additional provisional applications:
追加的仮出願：

Application Number(s) 出願番号	Filing Date 出願日

Additional U.S. or International applications:
追加的米国または国際出願：

Application Number(s) 出願番号	Filing Date 出願日	Status: patented, pending, abandoned (状態：特許成立済、係属中、放棄済)

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter "ASSIGNOR") by

(Insert
ASSIGNEE'S
Name(s)
Address(es))

SHOWA DENKO K.K.

13-9, Shibadai-mon 1-chome, Minato-ku, Tokyo 105-8518, Japan

(hereinafter "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

(Title of
Invention)

METAL OXIDE DISPERSION, METAL OXIDE ELECTRODE FILM, AND DYE SENSITIZED

SOLAR CELL

relating to International Patent Application PCT/JP 2005/001180 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(Insert date
of execution
of application,
if not
concurrent)

(a) executed on _____;

(b) filed on _____
Serial No. _____;

_____ is hereby authorized to insert in (b) the specified date, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Signature)

Susumu Kayama
(SIGNATURE)

Susumu Kayama
(TYPE NAME)

May 18, 2006
(DATE)

Yasuaki Wakizaka
(SIGNATURE)

Yasuaki Wakizaka
(TYPE NAME)

June 15, 2006
(DATE)

Kunio Kondo
(SIGNATURE)

Kunio Kondo
(TYPE NAME)

May 16, 2006
(DATE)

(SIGNATURE)

(TYPE NAME)

(DATE)

(SIGNATURE)

(TYPE NAME)

(DATE)

(SIGNATURE)

(TYPE NAME)

(DATE)

(SIGNATURE)

(TYPE NAME)

(DATE)

(SIGNATURE)

(TYPE NAME)

(DATE)